

IN THE CLAIMS:

The claims are as follows:

1. (Previously Presented) An interoperable data and voice communication system that supports simultaneous, multi-party communication between incompatible communication systems, said interoperable data and voice communication system comprising:

a first communication system that communicates with first users by a first addressing scheme and a first communication format for any of data and voice, each of said first users having a first unique Internet Protocol (IP) address;

a second communication system that communicates with second users by a second addressing scheme and a second communication format for any of data and voice, each of said second users having a second unique Internet Protocol (IP) address; and

an interoperable communication server, comprising:

a message transfer unit that transfers any of data and voice messages between a first user at said first unique IP address and a second user at said second unique IP address;

wherein said first addressing scheme is incompatible with said second addressing scheme; and

wherein a global directory, using a common hierarchical addressing scheme for said first unique IP address and said second unique IP address, connects a first user at said first unique IP address to a second user at said second unique IP address;

a translator connected to said message transfer unit, said translator translating any of data and voice messages sent from said first communication system into said second communication format compatible with said second communication system and from said second communication system into said first communication format compatible with said first communication system;

a voice/data converter that converts voice messages into data messages and data messages into voice messages; and

a voice-over-Internet-protocol (VoIP) unit connected to said message transfer unit, wherein said voice messages transmitted through said interoperable communication server are converted to a VoIP format.

2. (Cancelled).

3. (Previously Presented) The interoperable communication server in claim 1, further comprising an instant message unit that instant messages between said first communication system and said second communication system.

4. (Cancelled).

5. (Previously Presented) The interoperable communication server in claim 1, further comprising a registration unit that registers said first users and said second users with an incident and restricts communication to said first users and said second users upon registration with said incident.

6. (Cancelled).

7. (Previously Presented) The communication server in claim 1, all the limitations of which are incorporated herein by reference, wherein said first communication system and said second communication system each comprise any of a plurality of mobile wireless transceivers and a plurality of land-based transceivers used by emergency-response organizations.

8. (Previously Presented) An interoperable data and voice communication system that supports simultaneous, multi-party communication between incompatible communication systems, said interoperable data and voice communication system comprising:

a first communication system that communicates with first users by a first addressing scheme and a first communication format for any of data and voice, each of said first users having a first unique Internet Protocol (IP) address;

a second communication system that communicates with second users by a second addressing scheme and a second communication format for any of data and voice, each of said second users having a second unique Internet Protocol (IP) address; and

an interoperable communication server, comprising:

a message transfer unit that transfers any of data and voice messages between a first user at said first unique IP address and a second user at said second unique IP address;

wherein said first addressing scheme is incompatible with said second addressing scheme; and

wherein a global directory, using a common hierarchical addressing scheme for said first unique IP address and said second unique IP address, connects a first user at said first unique IP address to a second user at said second unique IP address;

a translator connected to said message transfer unit, said translator translating any of data and voice messages sent from said first communication system into said second communication format compatible with said second communication system and from said second communication system into said communication format compatible with said first communication system; and

a voice/data converter that converts voice messages into data messages and data messages into voice messages.

9. (Previously Presented) The interoperable communication server in claim 8, further comprising a registration unit that registers said first users and said second users with an incident and restricts communication to said first users and said second users upon registration with said incident.

10. (Previously Presented) The interoperable communication server in claim 8, further comprising an instant message unit that instant messages between said first communication system and said second communication system.

11. (Previously Presented) The interoperable communication server in claim 8, further comprising a voice-over-Internet-protocol (VoIP) unit connected to said message transfer unit,

wherein said voice messages transmitted through said interoperable communication server are converted to a VoIP format.

12. (Previously Presented) The interoperable communication server in claim 8, wherein said first communication system and said second communication system each comprise any of a plurality of mobile wireless transceivers and a plurality of land-based transceivers used by emergency-response organizations.

13. (Cancelled).

14. (Previously Presented) The interoperable communication server in claim 8, wherein said message transfer unit transfers any of said data and voice messages to provide real-time communication between said first users and said second users of.

15. (Previously Presented) An interoperable communication server comprising:

a message transfer unit that transfers any of data and voice messages between first users of a first communication system and second users of a second communication system;

wherein said first communication system communicates with said first users by a first addressing scheme and a first communication format for any of data and voice, each of said first users having a first unique Internet Protocol (IP) address;

wherein said second communication system communicates with said second users by a second addressing scheme and a second communication format for any of data and voice, each of said second users having a second unique IP address;

wherein said first addressing scheme is incompatible with said second addressing scheme; and

wherein a global directory, using a common hierarchical addressing scheme for said first unique IP address and said second unique IP address, connects a first user at said first unique IP address to a second user at said second unique IP address;

a translator connected to said message transfer unit, said translator translating any of data and voice messages sent from said first communication system into a second communication

format compatible with said second communication system and from said second communication system into said first communication format compatible with said first communication system; and

a voice/data converter that converts voice messages into data messages and data messages into voice messages.

16. (Previously Presented) The communication server in claim 15, all the limitations of which are incorporated herein by reference, further comprising an instant message unit that instant messages between said first communication system and said second communication system.

17. (Previously Presented) The interoperable communication server in claim 15, further comprising a registration unit that registers said first users and said second users with an incident and restricts communication to said first users and said second users upon registration with said incident.

18. (Previously Presented) The communication server in claim 15, all the limitations of which are incorporated herein by reference, wherein said first communication system and said second communication system each comprise any of a plurality of mobile wireless transceivers and a plurality of land-based transceivers used by emergency-response organizations.

19. (Cancelled).

20. (Previously Presented) The communication server in claim 15, all the limitations of which are incorporated herein by reference, wherein said message transfer unit transfers any of said data and voice messages to provide real-time communication between said first users and said second users.

21. (Previously Presented) A method of providing interoperable data and voice communications that supports simultaneous, multi-party communications between incompatible communication systems, said method comprising:

transferring any of data and voice messages between first users of a first communication system and second users of a second communication system via an interoperable communication server,

wherein said first communication system communicates with said first users by a first addressing scheme and a first communication format for any of data and voice, each of said first users having a first unique Internet Protocol (IP) address;

wherein said second communication system communicates with said second users by a second addressing scheme and a second communication format for any of data and voice, each of said second users having a second unique IP address;

wherein said first addressing scheme is incompatible with said second addressing scheme; and

wherein a global directory, using a common hierarchical addressing scheme for said first unique IP address and said second unique IP address, connects a first user at said first unique IP address to a second user at said second unique IP address;

translating any of data and voice messages sent from said first communication system into said second communication format compatible with said second communication system and from said second communication system into said first communication format compatible with said first communication system, using said interoperable communication server;

converting voice messages into data messages and data messages into voice messages, using said interoperable communication server; and

converting voice messages, transmitted through said interoperable communication server, to a voice-over-Internet-protocol (VoIP) format.

22. (Cancelled).

23. (Previously Presented) The method in claim 21, further comprising sending instant messages between said first communication system and said second communication system.

24. (Cancelled).

25. (Previously Presented) The method in claim 21, wherein said first communication system and said second communication system ~~may~~ each comprise any of a plurality of mobile wireless transceivers and a plurality of land-based transceivers used by emergency-response organizations.

26. (Cancelled).

27. (Previously Presented) The method in claim 21, wherein said transferring any of data and voice messages between first users of a first communication system and second users of a second communication system provides real-time communication between said first users and said second users.

28. (Previously Presented) A method of providing interoperable data and voice communications that supports simultaneous, multi-party communications between incompatible communication systems of different emergency response agencies, said method comprising:

identifying an incident;

associating a first communication system with said incident;

associating a second communication system with said incident;

transferring any of data and voice messages between first users of said first communication system and second users of said second communication system via an interoperable communication server,

wherein said first communication system communicates with said first users by a first addressing scheme and a first communication format for any of data and voice, each of said first users having a first unique Internet Protocol (IP) address;

wherein said second communication system communicates with said second users by a second addressing scheme and a second communication format for any of data and voice, each of said second users having a second unique IP address;

wherein said first addressing scheme is incompatible with said second addressing scheme; and

wherein a global directory, using a common hierarchical addressing scheme for said first unique IP address and said second unique IP address, connects a first user at said first unique IP address to a second user at said second unique IP address;

translating any of data and voice messages sent from said first communication system into said second communication format compatible with said second communication system and from said second communication system into said first communication format compatible with said first communication system, using said interoperable communication server;

converting voice messages into data messages and data messages into voice messages, using said interoperable communication server; and

restricting communications between said first communication system and said second communication system to said incident.

29. (Cancelled).

30. (Previously Presented) The method in claim 28, further comprising sending instant messages between said first communication system and said second communication system.

31. (Cancelled).

32. (Previously Presented) The method in claim 28, wherein said first communication system and said second communication system each comprise any of a plurality of mobile wireless transceivers and a plurality of land-based transceivers used by emergency-response organizations.

33. (Cancelled).

34. (Previously Presented) The method in claim 28, transferring any of data and voice messages between first users of a first communication system and second users of a second

communication system provides real-time communication between said first users and said second users.

35. (Previously Presented) A method of providing interoperable data and voice communications that supports simultaneous, multi-party communications between incompatible communication systems, said method comprising:

transferring any of data and voice messages between first users of a first communication system and second users of a second communication system via an interoperable communication server;

wherein said first communication system communicates with said first users by a first addressing scheme and a first communication format for any of data and voice, each of said first users having a first unique Internet Protocol (IP) address;

wherein said second communication system communicates with said second users by a second addressing scheme and a second communication format for any of data and voice, each of said second users having a second unique IP address;

wherein said first addressing scheme is incompatible with said second addressing scheme; and

wherein a global directory, using a common hierarchical addressing scheme for said first unique IP address and said second unique IP address, connects a first user at said first unique IP address to a second user at said second unique IP address;

translating any of data and voice messages sent from said first communication system into said second communication format compatible with said second communication system and from said second communication system into said first communication format compatible with said first communication system, using said interoperable communication server; and

converting voice messages into data messages and data messages into voice messages, using said interoperable communication server.

36. (Previously Presented) The method in claim 35, further comprising sending instant messages between said first communication system and said second communication system.

37. (Cancelled).

38. (Previously Presented) The method in claim 35, wherein said first communication system and said second communication system each comprise any of a plurality of mobile wireless transceivers and a plurality of land-based transceivers used by emergency-response organizations.

39. (Cancelled).

40. (Previously Presented) The method in claim 35, wherein transferring any of data and voice messages between first users of a first communication system and second users of a second communication system provides real-time communication between said first users and said second users.